

### Abstract

A method and apparatus for thermally simulating a circuit over a network is provided. Techniques are provided for designing a circuit that satisfies user-specified functional requirements received over a network. Based on the specified requirements, components and a topology for constructing the circuit are automatically determined. The components determined during this operation have operational values such that, when the components are arranged according to the topology to form the circuit, the circuit satisfies the user-specified functional requirements. One or more web pages that identify the components are then delivered to the browser over the network. The component and topology information may be used to generate a schematic diagram that is delivered in a web page to the user over the network. The user may thermally simulate the designed circuit. Many characteristics of the board may be adjusted to provide an accurate thermal simulation. The user may place an order over the network for one of the components, a kit of all of the components, a custom made circuit made from the components, and/or a prefabricated circuit that is functionally similar to the one that was designed.

